

REMARKSIN THE CLAIMS:

Applicants respectfully request the Examiner to enter the amendment amending Claims 1, 12, 39, 51, 58, and 64 and cancelling Claim 11, as shown below.

## PREVIOUSLY PRESENTED CLAIM 1 IS AMENDED AS FOLLOWS:

In line 1 of the preamble the words -- at temperatures above about 60°C -- are ADDED AFTER the word “curable” and BEFORE the words “to form”. The change is made to further limit the claim by reciting the temperature used to cure the formed structure. Support is found in paragraph [0030], and step 7) of paragraph [0034] of the written specification.

In step c) of the claim, the word “and” AFTER the semicolon is DELETED. The change is made to account for an added limitation to the claim.

In step d) of the claim, the words and punctuation -- catalyst; and -- are ADDED AFTER the word “amine” and a carriage return is ADDED BEFORE the period ending the sentence. The change is made to further distinguish between the two catalysts recited by the specification and to account for the new limitation added to the claim. Support is found in paragraphs [0029] and [0032] and [0033] of the written specification.

In new step e) of the claim, the words and item number punctuation -- e) a bulk filler -- are ADDED BEFORE the period ending the sentence. The change is made to further describe the claim with an additional feature. Support is found in canceled Claim 11 and in paragraph [0023] of the written specification.

## PREVIOUSLY PRESENTED CLAIMS 2 – 10 ARE UNCHANGED.

CLAIM 11 IS CANCELED.

## ORIGINAL CLAIM 12 IS AMENDED AS FOLLOWS:

In line 1 of the claim, the dependency of the claim is changed from “Claim 11” to

-- Claim 1 --. The change is account for the cancellation of previously presented Claim 8.

PREVIOUSLY PRESENTED CLAIMS **13 – 18** ARE UNCHANGED

CLAIMS **19 – 38** WERE PREVIOUSLY CANCELED.

ORIGINAL CLAIM **39** IS AMENDED AS FOLLOWS:

In line 1 of step a) of the claim, the word “and” is DELETED and REPLACED with a comma; and the punctuation and words -- and a bulk filler --. Are ADDED AFTER the words “isocyanate resin” and BEFORE the words “to provide”. The change is made to further describe the claim with an additional feature. Support is found in original Claim **51** and in paragraph [0023] of the written specification.

In line 2 of step b) of the claim, the word “amine” BEFORE the word “initiating” is DELETED and REPLACED with the word -- amines --. The change is made to correct the syntax of the clause since the noun is referring to both the tertiary and cyclic amines. Support is found in paragraphs [0029] and [0032] of the written specification.

In line 4 of step g) of the claim, the quantity “25 MPa” is DELETED and REPLACED with the words -- 60% of a mechanical compressive strength measured at room temperature --. The change is made to better describe the invention since compressive strength is seen to vary with density (**TABLE 3** of the written description). Support for the change is found in paragraph [0044] and **TABLE 4** of the written specification.

PREVIOUSLY PRESENTED CLAIMS **40 – 50** ARE UNCHANGED

ORIGINAL CLAIM **51** IS AMENDED AS FOLLOWS:

In line 2 of the claim, AFTER the words “further comprises”, the words “the steps of adding a quantity of a bulk filler to said mixed resin mixture, and” are DELETED in order to account for the amendment to step a) in Claim **39**.

PREVIOUSLY PRESENTED CLAIMS **52 – 57** ARE UNCHANGED

**ORIGINAL CLAIM 58 IS AMENDED AS FOLLOWS:**

In original step a) of the claim, the word “the” AFTER the words “foam member” is DELETED. The change is made to correct the syntax of the claim.

In line 3 of original step b) of the claim, the word “to” AFTER the words “at about”, and BEFORE the number “150” is DELETED. The change is made to correct the syntax of the claim.

In line 3 of original step c) of the claim, the word “to” AFTER the words “at about”, and BEFORE the number “180” is DELETED. The change is made to correct the syntax of the claim.

In line 3 of original step d) of the claim, the word “to” AFTER the words “at about”, and BEFORE the number “200” is DELETED. The change is made to correct the syntax of the claim.

In line 1 of original step e) of the claim, the word “to” BEFORE the number “65” is DELETED and REPLACED BETWEEN the immediately preceding words “member” and “about”. In line 3 of original step e) of the claim, the word “to” BEFORE the number “65” is DELETED. The changes are made to correct the syntax of the claim.

PREVIOUSLY PRESENTED CLAIM 59 IS UNCHANGED.

CLAIMS 60 – 63 WERE PREVIOUSLY CANCELED.

**ORIGINAL CLAIM 64 IS AMENDED AS FOLLOWS:**

In line 1 of step a) of the claim, the word “and” is DELETED and REPLACED with a comma; and the punctuation and words -- , and a bulk filler --. Are ADDED AFTER the words “isocyanate resin” and BEFORE the words “to provide”. The change is made to further describe the claim with an additional feature. Support is found in paragraph [0023] of the written specification.

In line 2 of step b) of the claim, the word “amine” BEFORE the word “initiating” is DELETED and REPLACED with the word -- amines --. The change is made to correct the

syntax of the clause since the noun is referring to both the tertiary and cyclic amines. Support is found in paragraphs [0029] and [0032] of the written specification.

In line 4 of step g) of the claim, the quantity "25 MPa" is DELETED and REPLACED with the words -- 60% of a mechanical compressive strength measured at room temperature --. The change is made to better describe the invention since compressive strength is seen to vary with density (**TABLE 3** of the written description). Support for the change is found in paragraph [0044] and **TABLE 4** of the written specification.

PREVIOUSLY PRESENTED CLAIMS **65** AND **66** ARE UNCHANGED.

CLAIM **67** WAS PREVIOUSLY CANCELED.

Applicants assert that no new matter was included as the result of the foregoing amendment.

REJECTION UNDER 35 U.S.C. §103(a)***Examiner's Remarks***

Claims 1-18, 39-59, and 64-66 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Hayash, Jr. et al.(U.S. Patent Serial No. 3,673,128), alone, or in view of Fuzesi et al.( U.S. Patent Serial No.4,699,931) and/or Whinnery et al. TEPIC document (Whinnery et al.), for the reasons given in his original response dated

***Applicants' Response***

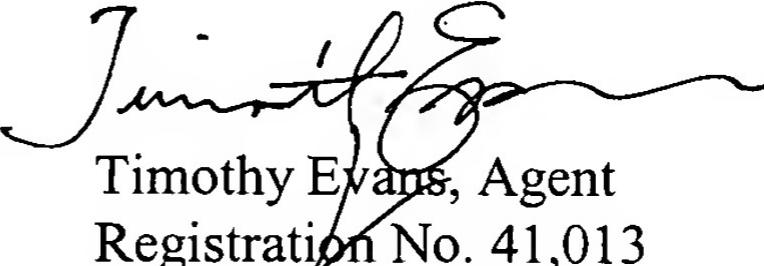
Applicants respectfully traverse the Examiner's rejection with regard to Claims 1-18, 39-59, and 64-66 Applicants do not believe that he has met his burden for maintaining a showing of *prima facie* obviousness. As Examiner well knows, MPEP §2143 requires that to maintain a case for obviousness each and every element and limitation must be found in the prior art. Moreover, MPEP §2143.01(1.) requires the prior art to suggest the desirability of the claimed invention. However, Applicants note that Hayash et al., ('128) quite clearly recite and claim using a blowing agent as a necessary ingredient to prepare their foam; that Hayash et al., expressly recite *not* heating their ingredients mixture during the polymerization reaction; and that Hayash et al., provide absolutely no express or implied teaching to suggest an advantage to combining two or more of the plurality of amine catalysts enumerated at col. 7 of their patent. Furthermore, neither Fuzesi, et al., ('931) nor Whinnery, et al. (TEPIC) disclose, teach or suggest using the claimed combination of two or more amine catalysts to catalyze a polyisocyanurate polymerization reaction, and both Hayash et al., and Fuzesi et al., require the use of s a blowing agent as part or the ingredients necessary to prepare their foams.

CONCLUSION

Applicants respectfully assert that the instant invention claims unique structure that are neither anticipated, nor suggested by the prior art. Applicants, therefore, respectfully request reconsideration of the claims now presented and earnestly solicits allowance of this application.

This response is:

Respectfully submitted by,  
SANDIA NATIONAL LABORATORIES



Timothy Evans, Agent  
Registration No. 41,013

P.O. Box 969, MS 9031  
Livermore, CA 94551-0969  
Telephone (925) 294 - 3690

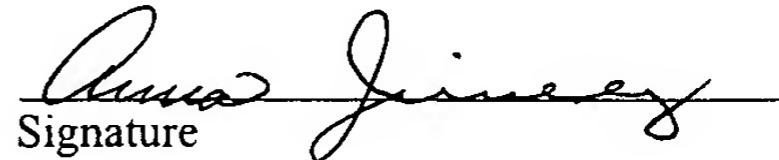
CERTIFICATION UNDER 37 CFR 1.8

I hereby certify that this Response and Amendment and any documents referred to as being attached thereto are being deposited with the U. S. Postal Service as FIRST CLASS mail addressed to: Mail Stop Non Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date of Deposit: 2/2/07



Anna Jimenez  
Person Making Deposit



Anna Jimenez  
Signature

Attachments:

Return receipt Postcard